

Listing of Claims

1. (Currently amended) A transgenic plant comprising a plant transformation vector comprising a nucleotide sequence that encodes or is complementary to a sequence that encodes a HI0103.1 polypeptide comprising:

- a) the amino acid sequence set forth as SEQ ID NO: 2; or
- b) an amino acid sequence having at least 95% sequence identity to the amino acid sequence of SEQ ID NO: 2, or an ortholog thereof, ;
whereby the transgenic plant has a high oil phenotype relative to control plants a plant of the same species that does not comprise the plant transformation vector.

2. (Original) The transgenic plant of claim 1, which is selected from the group consisting of rapeseed, soy, corn, sunflower, cotton, cocoa, safflower, oil palm, coconut palm, flax, castor and peanut.

3. (Original) A plant part obtained from the plant according to claim 1.

4. (Original) The plant part of claim 3, which is a seed.

5. (Currently amended) A method of producing oil comprising growing the transgenic plant of claim 1 and recovering oil from said plant.

6. (Currently amended) A method of producing a high oil phenotype in a plant, said method comprising: a) introducing into progenitor cells of the plant a plant transformation vector comprising a nucleotide sequence that encodes or is complementary to a sequence that encodes a HI0103.1 polypeptide comprising the amino acid sequence set forth as SEQ ID NO: 2; or an amino acid sequence having at least 95% sequence identity to the amino acid sequence of SEQ ID NO: 2, or an ortholog thereof, and b) growing the transformed progenitor cells to produce a transgenic plant,

wherein said polynucleotide-nucleotide sequence is expressed, and said transgenic plant exhibits an altered oil content phenotype relative to control plants a plant of the same species that does not comprise the plant transformation vector.

7. (Original) A plant obtained by a method of claim 6.

8. (Original) The plant of claim 7, which is selected from the group consisting of rapeseed, soy, corn, sunflower, cotton, cocoa, safflower, oil palm, coconut palm, flax, castor and peanut.

9.-11. (Canceled)

12. (New) The transgenic plant of claim 1, wherein the nucleotide sequence encodes or is complementary to a sequence that encodes a HI0103.1 polypeptide comprising an amino acid sequence having at least 95% sequence identity to the amino acid sequence of SEQ ID NO: 2.

13. (New) The transgenic plant of claim 12, wherein the nucleotide sequence encodes or is complementary to a sequence that encodes a HI0103.1 polypeptide comprising the amino acid sequence set forth as SEQ ID NO: 2.

14. (New) The transgenic plant of claim 13, wherein the nucleotide sequence that encodes or is complementary to a sequence that encodes a HI0103.1 polypeptide consists of the amino acid sequence set forth as SEQ ID NO: 2.

15. (New) The method claim 6, wherein the nucleotide sequence encodes or is complementary to a sequence that encodes a HI0103.1 polypeptide comprising an amino acid sequence having at least 95% sequence identity to the amino acid sequence of SEQ ID NO: 2.

16. (New) The method of claim 15, wherein the nucleotide sequence encodes or is complementary to a sequence that encodes a HI0103.1 polypeptide comprising the amino acid sequence set forth as SEQ ID NO: 2.

17. (New) The method of claim 16, wherein the nucleotide sequence that encodes or is complementary to a sequence that encodes a HI0103.1 polypeptide consists of the amino acid sequence set forth as SEQ ID NO: 2.